

Reproduction of EXFOR backups with new utility codes (NRDC2023 A91)

(N. Otsuka, 2023-11-06, CP-D/1093)

EXFOR utility codes

Following Action 91 from the NRCD 2023:

Prepare distribution EXFOR-Master File and Dictionaries (from 2005 onward). Prepare and distribute among NRDC members a software generating next Master File using previous Master File and TRANS file providing possibility for every NRDC Data Centre to maintain and reproduce Master File locally.

I developed the following four scripts:

- **DIRINI**: A script to create a local EXFOR entry storage on your computer from an EXFOR library tape (e.g., master).
- **DIRUPD**: A script to update the local EXFOR entry storage by addition of a new trans tape.
- **MAKLIB**: A script to create an EXFOR library tape.
- **SEQADD**: A script to add record identification at cols. 67-80 etc. (like ZORDER).

which are available on the NRDC website as the “EXFOR utility codes” with IAEA-NDS-0244 as a manual.

Reproduction of EXFOR backups

We concluded in the NRDC 2023 meeting that distribution of the EXFOR master should be made retroactively c.a. 2015 onward (NRDC2023 C5). I selected an EXFOR backup “EXFOR-2015-03-11.bck” as the starter of reproduction. This is because we do not have TRANS tapes named with extra characters (e.g., trans.1330_nds) on the NDS open area after production of this backup file, and it makes the sequence of TRANS tapes clearer. By using Ver. 2023-11-02 of the new utility codes, one can reproduce EXFOR-2015-04-17.bck and EXFOR-2015-05-05.bck by the following operations:

```
# Initialization with EXFOR backup Ver.2015-03-11 as the starter
x4_dirini.py -f -l lib/EXFOR-2015-03-11.bck -d entry
# Loading TRANS.L025
x4_dirupd.py -f -c -t trans/trans.l025 -d entry
# Reproduction of EXFOR backup Ver.2015-03-16
x4_maklib.py -f -d entry -l myEXFOR-2015-03-16.bck -i 1001"
# Loading TRANS.4167, C146 and M077
x4_dirupd.py -f -c -t trans/trans.4167 -d entry
x4_dirupd.py -f -c -t trans/trans.c146 -d entry
x4_dirupd.py -f -c -t trans/trans.m077 -d entry
# Reproduction of EXFOR backup Ver.2015-04-17
x4_maklib.py -f -d entry -l myEXFOR-2015-04-17.bck -i 1001"
```

The option `-c` is added to reflect elimination of the following items made in original backup production:

1. N2 of ENDBIB, ENDCOMMON, ENDSUBENT and ENENTRY N2

2. record identification (Cols. 67-80) and trailing blanks in Cols. 12-66 in all records.

Additionally, the option `-a` was applied to `x4_maklib.py` for reproduction of EXFOR-2023-05-23.bck and later versions to reflect

3. addition of "19" to the two-digit year of ENTRY, SUBENT and NOSUBENT N2

following the original backup production procedure.

I continued the above-mentioned sequence of operations (see Appendix for the sequence), and confirmed that the new utility codes reproduce **all backups issued after EXFOR-2015-03-11.bck** if we accept deviation due to the following extra operations done in original backup production but not in reproduction:

1. Adoption of SUBENT N2 of the common subentry (001) as ENTRY N2 in general
2. Replacement of ENDSUBENT N1 record of O2363.001 (45 in TRANS.O064 but 41 in original backup) during inclusion of TRANS.O064. (41 is correct. It is not clear if ORDER processing was done during production of EXFOR backup).

Rules for better reproducibility

I propose some format rules to improve reproducibility:

1. Retransmit an entry in a trans tape labelled by the same area (except for CPND entries maintained by NNDC for which area C trans tapes are always used for retransmission of entries in areas C, P and T).
2. Provide the date of last update in ENTRY/SUBENT/NOSUBENT N2 as defined in the Formats Manual. (i.e., N2 of a newer version must be larger than N2 of an older version).
3. Provide the date of deposition to the NDS open area in TRANS N2 as proposed in Memo CP-D/1089 (i.e., N2 of a newer version must be larger than N2 of an older version). I would like to ask your permission to update N2 at NDS to avoid an additional iteration with you.
4. Provide zero rather than a blank in N1 and N2 of the system identifiers presently unused (implemented by ZORDER).
5. Provide the date of last update rather than a blank in NOSUBENT N2.

Various problems observed during this reproducibility checking are summarized in the Appendix.

Appendix
Record and remarks on reproduction of EXFOR backup files with new utility codes
(2023-11-04)

- Seq.: Sequence of TRANS inclusion for backup production and comparison with the original backup
- Date/Time: Time stamp of the files on the backup area
- File: File name on the zipped one in the backup area
- Remark on backup: Remark on the backup production procedure (An entry number without further information means the SUBENT N2 is adopted as ENTRY N2 in backup production)
- Remark on trans: Remark on trans tapes (“M044 → L025” signifies that an entry transmitted last time in an area M tape is retransmitted in an area L tape. “N2: 20171029 → 20170905” means an entry transmitted with October 2017 in N2 is retransmitted with September 2017 in N2.)

Seq	Date	Time	File	Remark on backup	Remark on trans
1	2015-03-11	12:44:30	EXFOR-2015-03-11	A non ASCII character in the REACTION record of A0612.130 (resolved in trans.a083)q	
2	2015-03-16	14:42:51	trans.l025		L0005.000-001: M044 → L025
3	2015-03-16	19:21:18	EXFOR-2015-03-16		
4	2015-04-17	17:25:38	trans.4167		
5	2015-04-17	17:25:39	trans.c146		P0132.000-001: D071 → C146
6	2015-04-17	17:25:40	trans.m077		
7	2015-04-17	18:32:43	EXFOR-2015-04-17		
8	2015-05-05	14:27:57	trans.c147		T0053.000-002: T018 → C147
9	2015-05-05	14:27:58	trans.d098		
10	2015-05-05	14:27:59	trans.e095		
11	2015-05-05	14:28:00	trans.e096		
12	2015-05-05	14:28:00	trans.g032		
13	2015-05-05	14:28:00	trans.l026	L0058	L0058.002-015, 021, 026-028: M044 → L026
14	2015-05-05	14:28:01	trans.r028		
15	2015-05-05	15:26:44	EXFOR-2015-05-05		
16	2015-06-03	18:55:03	trans.2241		

17	2015-06-03	18:55:05	trans.3169
18	2015-06-03	18:55:06	trans.4168
19	2015-06-03	18:55:07	trans.m078
20	2015-06-04	14:35:07	EXFOR-2015-06-04
21	2015-07-01	10:19:46	trans.1405
22	2015-07-01	10:19:47	trans.a083
23	2015-07-01	10:19:49	trans.c148
24	2015-07-01	10:19:50	trans.e097
25	2015-07-01	10:19:51	trans.k015
26	2015-07-01	10:19:51	trans.m079
27	2015-07-01	16:36:47	EXFOR-2015-07-01
28	2015-08-17	09:50:40	trans.1406
29	2015-08-17	09:50:41	trans.3170
30	2015-08-17	09:50:42	trans.4169
31	2015-08-17	09:50:43	trans.c149
32	2015-08-17	09:50:46	trans.d099
33	2015-08-17	09:50:49	trans.f058
34	2015-08-17	09:50:51	trans.g033
35	2015-08-17	09:50:52	trans.l027
36	2015-08-17	09:50:53	trans.o054
37	2015-08-17	09:50:56	trans.v033
38	2015-08-17	12:26:38	EXFOR-2015-08-17
39	2015-09-02	15:23:16	trans.1407
40	2015-09-02	15:58:03	EXFOR-2015-09-02
41	2015-10-06	09:21:30	trans.3171
42	2015-10-06	09:21:31	trans.3172
43	2015-10-06	09:21:31	trans.c150
44	2015-10-06	09:21:32	trans.c151
45	2015-10-06	09:21:32	trans.d100

46	2015-10-06	09:21:33	trans.e098	
47	2015-10-06	09:21:34	trans.e099	
48	2015-10-06	09:21:34	trans.g034	
49	2015-10-06	09:21:34	trans.m080	
50	2015-10-06	09:57:24	EXFOR-2015-10-06	
51	2015-11-23	11:21:12	trans.2242	
52	2015-11-23	11:21:15	trans.4170	
53	2015-11-23	11:21:17	trans.4171	
54	2015-11-23	11:21:18	trans.c152	
55	2015-11-23	11:21:20	trans.d101	
56	2015-11-23	11:36:45	EXFOR-2015-11-23	
57	2016-02-01	17:28:56	trans.1408	13695
58	2016-02-01	17:29:04	trans.c153	
59	2016-02-01	17:29:05	trans.c154	
60	2016-02-01	20:37:15	EXFOR-2016-02-01	
61	2016-02-02	16:47:52	trans.d102	
62	2016-02-02	18:13:07	EXFOR-2016-02-02	
63	2016-03-02	13:33:08	trans.1409	
64	2016-03-02	13:33:09	trans.1410	
65	2016-03-02	13:33:09	trans.1411	
66	2016-03-02	13:33:11	trans.2243	
67	2016-03-02	13:33:17	trans.2244	
68	2016-03-02	13:33:23	trans.4172	
69	2016-03-02	13:33:32	trans.4173	
70	2016-03-02	13:33:41	trans.e100	
71	2016-03-02	13:33:43	trans.f059	
72	2016-03-02	13:33:44	trans.l028	
73	2016-03-02	13:33:45	trans.s019	
74	2016-03-02	14:30:23	EXFOR-2016-03-02	

75	2016-04-01	17:12:31	trans.c155
76	2016-04-01	17:12:32	trans.f060
77	2016-04-01	17:12:32	trans.m081
78	2016-04-01	17:31:49	EXFOR-2016-04-01
79	2016-05-03	17:53:59	trans.1412
80	2016-05-03	17:54:00	trans.1413
81	2016-05-03	17:54:01	trans.1414
82	2016-05-03	17:54:01	trans.3173
83	2016-05-03	17:54:02	trans.d103
84	2016-05-03	17:54:04	trans.e101
85	2016-05-03	17:54:05	trans.m082
86	2016-05-03	18:08:52	EXFOR-2016-05-03
87	2016-05-05	10:11:50	trans.v034
88	2016-05-05	12:00:17	EXFOR-2016-05-05
89	2016-06-03	19:44:20	trans.1415
90	2016-06-03	19:44:21	trans.2245
91	2016-06-03	19:44:24	trans.c156
92	2016-06-03	19:44:25	trans.e102
93	2016-06-03	19:44:26	trans.f061
94	2016-06-03	19:44:26	trans.o055
95	2016-06-03	19:45:18	trans.2246
96	2016-06-03	19:45:28	trans.o056
97	2016-06-03	19:47:09	trans.2247
98	2016-06-03	19:47:13	trans.o057
99	2016-06-03	19:48:13	trans.2248
100	2016-06-03	20:06:09	EXFOR-2016-06-03
101	2016-07-01	11:17:21	trans.1416
102	2016-07-01	11:17:22	trans.a084
103	2016-07-01	11:17:41	trans.d104

104	2016-07-01	11:17:46	trans.e103	
105	2016-07-01	11:17:52	trans.g035	
106	2016-07-01	11:17:52	trans.m083	
107	2016-07-01	11:47:01	EXFOR-2016-07-01	
108	2016-09-02	10:15:20	trans.1417	
109	2016-09-02	10:15:20	trans.2249	23274
110	2016-09-02	10:15:22	trans.c157	C2194
111	2016-09-02	10:15:23	trans.f062	
112	2016-09-02	10:15:23	trans.k016	
113	2016-09-02	10:15:24	trans.l029	
114	2016-09-02	10:21:25	trans.1418	
115	2016-09-02	10:21:26	trans.2250	
116	2016-09-02	10:21:26	trans.c158	
117	2016-09-02	11:50:26	EXFOR-2016-09-02	
118	2016-09-05	17:38:07	trans.3174	
119	2016-09-05	17:38:07	trans.d105	
120	2016-09-15	10:05:21	EXFOR-2016-09-05	
121	2016-10-17	12:57:45	trans.2251	
122	2016-10-17	12:57:45	trans.b025	
123	2016-10-17	12:57:46	trans.c159	
124	2016-10-17	12:57:47	trans.c160	
125	2016-10-17	12:57:47	trans.l030	
126	2016-10-17	13:17:54	EXFOR-2016-10-17	
127	2016-10-18	11:11:33	trans.a085	
128	2016-10-18	11:27:25	EXFOR-2016-10-18	
129	2016-11-01	15:19:44	trans.1419	
130	2016-11-01	15:19:45	trans.c161	P0009.000-001: P004 → C161
131	2016-11-01	15:19:47	trans.o058	
132	2016-11-01	16:57:44	EXFOR-2016-11-01	

133	2016-12-12	09:43:38	trans.3175
134	2016-12-12	09:43:38	trans.c162
135	2016-12-12	09:43:39	trans.d106
136	2016-12-12	09:43:40	trans.k017
137	2016-12-12	09:43:41	trans.m084
138	2016-12-12	10:19:35	EXFOR-2016-12-12
139	2017-02-01	13:58:29	trans.2252
140	2017-02-01	13:58:31	trans.2253
141	2017-02-01	13:58:32	trans.3176
142	2017-02-01	13:58:33	trans.4174
143	2017-02-01	13:58:35	trans.c163
144	2017-02-01	13:58:35	trans.d107
145	2017-02-01	13:58:35	trans.f063
146	2017-02-01	13:58:36	trans.g036
147	2017-02-01	13:58:36	trans.l031
148	2017-02-01	13:58:36	trans.m085
149	2017-02-01	13:58:37	trans.o059
150	2017-02-01	13:58:38	trans.s020
151	2017-02-01	14:14:50	EXFOR-2017-02-01
152	2017-03-02	11:14:28	trans.2254
153	2017-03-02	11:14:29	trans.2255
154	2017-03-02	11:14:30	trans.m086
155	2017-03-02	11:37:21	EXFOR-2017-03-02
156	2017-04-03	10:42:33	trans.2256
157	2017-04-03	10:43:05	trans.2257
158	2017-04-03	10:43:16	trans.c164
159	2017-04-03	10:43:16	trans.d108
160	2017-04-03	11:19:40	trans.e104
161	2017-04-03	10:43:17	trans.e105

162	2017-04-03	10:43:19	trans.e106
163	2017-04-03	12:10:55	EXFOR-2017-04-03
164	2017-05-04	11:20:15	trans.1420
165	2017-05-04	11:20:16	trans.1421
166	2017-05-04	11:20:17	trans.1422
167	2017-05-04	11:20:20	trans.a086
168	2017-05-04	11:20:21	trans.a087
169	2017-05-04	11:20:21	trans.f064
170	2017-05-04	11:20:22	trans.g037
171	2017-05-04	11:20:23	trans.m087
172	2017-05-04	11:34:32	EXFOR-2017-05-04
173	2017-05-05	09:19:48	trans.1423
174	2017-05-05	10:10:12	EXFOR-2017-05-05
175	2017-05-10	15:10:58	trans.e107
176	2017-05-10	15:44:26	EXFOR-2017-05-10
177	2017-06-07	11:46:21	trans.1424
178	2017-06-07	11:46:22	trans.1425
179	2017-06-07	11:46:23	trans.2258
180	2017-06-07	11:46:24	trans.3177
181	2017-06-07	11:46:25	trans.e108
182	2017-06-07	11:46:25	trans.s021
183	2017-06-07	14:43:29	trans.m088
184	2017-06-07	15:44:51	EXFOR-2017-06-07
185	2017-06-09	16:13:19	trans.o060
186	2017-06-09	16:13:21	trans.o061
187	2017-06-09	16:27:16	EXFOR-2017-06-09
188	2017-06-14	15:23:45	trans.2259
189	2017-06-14	16:13:19	EXFOR-2017-06-14
190	2017-07-03	10:38:25	trans.1426

191	2017-07-03	10:38:26	trans.3178	
192	2017-07-03	10:38:26	trans.4175	
193	2017-07-03	10:38:29	trans.c165	C2240
194	2017-07-03	10:38:30	trans.d109	
195	2017-07-03	10:38:31	trans.d110	D6251
196	2017-07-03	10:38:32	trans.j010	
197	2017-07-03	11:26:09	EXFOR-2017-07-03	
198	2017-09-04	12:41:38	trans.1427	
199	2017-09-04	12:41:39	trans.b026	
200	2017-09-04	12:41:39	trans.c166	
201	2017-09-04	12:41:40	trans.l032	
202	2017-09-04	12:41:40	trans.m089	
203	2017-09-04	12:41:41	trans.v035	
204	2017-09-04	13:05:10	EXFOR-2017-09-04	
205	2017-10-16	12:00:32	trans.1428	
206	2017-10-16	12:00:33	trans.1429	
207	2017-10-16	12:00:33	trans.3179	
208	2017-10-16	12:00:34	trans.c167	C1791
209	2017-10-16	12:00:35	trans.d111	
210	2017-10-16	12:00:36	trans.f065	F1313
211	2017-10-16	12:00:37	trans.g038	
212	2017-10-16	12:00:37	trans.m090	
213	2017-10-16	12:00:38	trans.s022	
214	2017-10-16	12:19:56	EXFOR-2017-10-16	
215	2017-11-01	16:12:00	trans.1430	
216	2017-11-01	16:12:02	trans.1431	
217	2017-11-01	17:02:31	EXFOR-2017-11-01	
218	2017-11-10	10:01:13	trans.1432	
219	2017-11-10	12:09:13	EXFOR-2017-11-10	

220	2017-11-16	16:20:31	trans.m091	
221	2017-11-16	16:34:42	EXFOR-2017-11-16	
222	2017-11-22	15:27:35	trans.3180	
223	2017-11-22	15:27:36	trans.g039	
224	2017-11-22	18:50:21	trans.d112	
225	2017-11-22	20:48:14	EXFOR-2017-11-22	
226	2017-12-08	13:37:54	trans.c168	
227	2017-12-08	13:54:33	EXFOR-2017-12-08	
228	2017-12-22	17:20:01	trans.1433	
229	2017-12-22	17:40:12	EXFOR-2017-12-22	
230	2017-12-28	15:33:09	trans.c169	
231	2017-12-28	15:54:29	EXFOR-2017-12-28	
232	2018-01-08	16:22:04	trans.1434	
233	2018-01-08	16:41:49	EXFOR-2018-01-08	
234	2018-01-09	15:23:29	trans.m092	
235	2018-01-09	15:39:25	EXFOR-2018-01-09	
236	2018-01-18	09:47:13	trans.e109	
237	2018-01-18	09:47:14	trans.f066	
238	2018-01-18	10:04:14	EXFOR-2018-01-18	
239	2018-01-22	16:34:02	trans.2260	23340
240	2018-01-22	16:34:04	trans.4176	
241	2018-01-22	16:34:05	trans.c170	C1145.000-001: N2: 20171029 → 20170905
242	2018-01-22	17:00:38	EXFOR-2018-01-22	
243	2018-01-23	14:28:34	trans.1435	
244	2018-01-23	14:28:36	trans.2261	
245	2018-01-23	15:07:21	trans.1436	
246	2018-01-23	15:07:22	trans.2262	
247	2018-01-23	15:25:06	EXFOR-2018-01-23	
248	2018-01-24	11:24:45	trans.2263	20941

249	2018-01-24	11:24:47	trans.e110
250	2018-01-24	16:58:50	trans.2264
251	2018-01-24	16:58:53	trans.o062
252	2018-01-24	17:23:06	EXFOR-2018-01-24
253	2018-01-29	17:50:14	trans.2265
254	2018-01-29	18:16:54	EXFOR-2018-01-29
255	2018-01-30	14:33:33	trans.o063
256	2018-01-30	14:51:55	EXFOR-2018-01-30
257	2018-02-05	09:57:11	trans.l033
258	2018-02-05	14:51:18	EXFOR-2018-02-05
259	2018-02-09	18:46:11	trans.1437
260	2018-02-09	18:46:12	trans.3181
261	2018-02-09	18:46:13	trans.s023
262	2018-02-09	19:04:20	EXFOR-2018-02-09
263	2018-02-16	19:13:15	trans.c171
264	2018-02-16	19:35:09	EXFOR-2018-02-16
265	2018-02-23	15:59:27	trans.e111
266	2018-02-23	15:59:29	trans.l034
267	2018-02-23	15:59:29	trans.m093
268	2018-02-23	16:25:52	EXFOR-2018-02-23
269	2018-03-09	19:01:03	trans.c172
270	2018-03-09	19:23:42	EXFOR-2018-03-09
271	2018-03-16	11:59:31	trans.d113
272	2018-03-16	11:59:34	trans.d114
273	2018-03-16	11:59:35	trans.g040
274	2018-03-16	13:17:23	EXFOR-2018-03-16
275	2018-04-02	10:10:07	trans.1438
276	2018-04-02	10:10:12	trans.4177
277	2018-04-02	11:09:08	EXFOR-2018-04-02

278	2018-04-06	13:14:27	trans.m094
279	2018-04-06	13:43:42	EXFOR-2018-04-06
280	2018-04-09	14:49:52	trans.f067
281	2018-04-09	15:09:47	EXFOR-2018-04-09
282	2018-04-10	17:30:23	trans.c173
283	2018-04-10	17:49:49	EXFOR-2018-04-10
284	2018-04-20	17:15:07	trans.3182
285	2018-04-20	17:15:09	trans.d115
286	2018-04-20	12:40:02	EXFOR-2018-04-20
287	2018-04-23	17:16:59	trans.a088
288	2018-04-23	17:48:08	EXFOR-2018-04-23
289	2018-04-25	10:02:53	trans.e112
290	2018-04-25	10:02:54	trans.e113
291	2018-04-25	10:02:55	trans.e114
292	2018-04-25	10:28:46	EXFOR-2018-04-25
293	2018-04-27	19:47:08	trans.3183
294	2018-04-28	19:47:09	trans.e115
295	2018-04-27	09:55:00	EXFOR-2018-04-27
296	2018-05-14	13:35:21	trans.l035
297	2018-05-14	14:16:06	EXFOR-2018-05-14
298	2018-05-16	14:12:10	trans.m095
299	2018-05-16	16:15:35	EXFOR-2018-05-16
300	2018-05-25	12:28:17	trans.4178
301	2018-05-25	13:00:39	EXFOR-2018-05-25
302	2018-06-12	09:59:20	trans.4179
303	2018-06-12	10:53:30	EXFOR-2018-06-12
304	2018-06-25	12:41:25	trans.1439
305	2018-06-25	16:51:28	trans.v036
306	2018-06-25	17:49:32	trans.b027

307	2018-06-25	18:25:13	EXFOR-2018-06-25	
308	2018-06-29	18:38:45	trans.3184	
309	2018-06-29	18:38:46	trans.3185	
310	2018-06-29	18:38:47	trans.b028	
311	2018-06-29	18:38:47	trans.d116	
312	2018-06-29	18:38:49	trans.d117	
313	2018-06-29	18:38:50	trans.g041	
314	2018-06-29	18:38:50	trans.s024	
315	2018-06-29	18:57:36	EXFOR-2018-06-29	
316	2018-09-03	09:26:29	trans.1440	
317	2018-09-03	09:26:34	trans.2266	
318	2018-09-03	09:26:59	trans.c174	
319	2018-09-03	09:27:01	trans.m096	
320	2018-09-04	11:59:28	EXFOR-2018-09-04	
321	2018-09-17	16:36:02	trans.2267	
322	2018-09-17	16:36:03	trans.a090	loaded before trans.a089
323	2018-09-17	17:09:27	EXFOR-2018-09-17	
324	2018-09-18	14:16:51	trans.1441	
325	2018-09-18	14:54:10	EXFOR-2018-09-18	
326	2018-10-08	12:28:51	trans.a089	loaded after trans.a090
327	2018-10-08	12:28:53	trans.c175	
328	2018-10-08	12:28:55	trans.e116	
329	2018-10-08	12:28:56	trans.f068	
330	2018-10-08	12:28:57	trans.l036	
331	2018-10-08	12:28:58	trans.o064	O2363.001: ENDSUBENT: N1=41 → 45
332	2018-10-08	12:50:28	EXFOR-2018-10-08	
333	2018-10-10	12:31:58	trans.m097	
334	2018-10-10	12:48:34	EXFOR-2018-10-10	

335	2018-10-12	13:35:07	trans.1442		
336	2018-10-12	13:35:08	trans.c176		
337	2018-10-12	13:53:18	EXFOR-2018-10-12		
338	2018-10-31	10:00:28	trans.1443		
339	2018-10-31	10:38:27	EXFOR-2018-10-31		
340	2018-11-29	10:31:33	trans.e117		
341	2018-11-29	10:31:45	trans.f069		
342	2018-11-29	10:30:53	EXFOR-2018-11-29		
343	2018-12-04	10:53:28	trans.3186		
344	2018-12-04	10:53:39	trans.d118		
345	2018-12-04	12:30:53	EXFOR-2018-12-04		
346	2018-12-06	20:17:35	trans.g042		
347	2018-12-06	20:36:50	EXFOR-2018-12-06		
348	2018-12-07	18:50:34	trans.m098	M0972, M0974	M0635.023, 025-030, 032-033, 035-036, 042, 045-049, 080, 082, 099, 101 N2: 20180712 = 20180712
349	2018-12-07	19:58:33	EXFOR-2018-12-07		
350	2018-12-31	12:12:13	trans.4180		
351	2018-12-31	13:09:14	EXFOR-2018-12-31		
352	2019-01-08	09:48:43	trans.e118		
353	2019-01-08	10:03:11	EXFOR-2019-01-08		
354	2019-01-09	16:18:02	trans.c177		
355	2019-01-09	16:33:29	EXFOR-2019-01-09		
356	2019-01-10	19:08:35	trans.1444		
357	2019-01-10	19:29:44	EXFOR-2019-01-10		
358	2019-01-18	16:56:19	trans.e119		
359	2019-01-18	17:09:32	EXFOR-2019-01-18		
360	2019-01-21	09:47:46	trans.c178		
361	2019-01-21	09:47:47	trans.c179		T0117.000-001: T018 → C179; T0233.000-001: T021 → C179

362	2019-01-21	17:15:35	trans.c180	
363	2019-01-21	17:34:21	EXFOR-2019-01-21	
364	2019-01-22	15:44:22	trans.c181	
365	2019-01-22	15:44:22	trans.e120	
366	2019-01-22	16:16:06	EXFOR-2019-01-22	
367	2019-01-31	17:33:49	trans.e121	
368	2019-01-31	17:54:52	EXFOR-2019-01-31	
369	2019-02-07	13:08:32	trans.o065	
370	2019-02-07	13:08:33	trans.o066	
371	2019-02-07	14:17:12	EXFOR-2019-02-07	
372	2019-02-18	10:15:55	trans.f070	
373	2019-02-18	10:31:54	EXFOR-2019-02-18	
374	2019-02-19	11:29:18	trans.2268	
375	2019-02-19	11:44:14	EXFOR-2019-02-19	
376	2019-02-21	09:42:14	trans.l037	
377	2019-02-21	09:58:51	EXFOR-2019-02-21	
378	2019-02-22	15:37:56	trans.2269	20384, 23370, 23377, 23396
379	2019-02-22	15:37:57	trans.2270	
380	2019-02-22	15:37:58	trans.2271	
381	2019-02-22	15:37:59	trans.k018	
382	2019-02-22	15:37:59	trans.r029	
383	2019-02-22	18:28:20	trans.s025	
384	2019-02-22	18:43:46	EXFOR-2019-02-22	
385	2019-02-25	13:28:20	trans.3187	
386	2019-02-25	13:42:01	EXFOR-2019-02-25	
387	2019-03-01	16:22:51	trans.1445	
388	2019-03-01	16:44:17	EXFOR-2019-03-01	
389	2019-03-18	10:04:34	trans.m099	
390	2019-03-18	10:20:13	EXFOR-2019-03-18	

391	2019-03-19	10:02:08	trans.e122	
392	2019-03-19	18:05:43	EXFOR-2019-03-19	
393	2019-04-01	14:33:21	trans.1446	13546.000-001 N2: 20181203 → 20181130
394	2019-04-01	14:33:21	trans.4181	40960, 41661
395	2019-04-01	14:33:22	trans.c182	
396	2019-04-01	14:33:23	trans.d119	
397	2019-04-01	14:48:05	EXFOR-2019-04-01	
398	2019-04-05	16:49:20	trans.2272	23429, 23433
399	2019-04-05	17:21:29	EXFOR-2019-04-05	
400	2019-04-24	09:12:24	trans.2273	
401	2019-04-24	09:12:26	trans.2274	
402	2019-04-24	14:15:38	trans.2275	
403	2019-04-24	15:30:33	EXFOR-2019-04-24	
404	2019-04-25	13:23:26	trans.2276	
405	2019-04-25	17:18:37	EXFOR-2019-04-25	
406	2019-04-26	17:17:30	trans.c183	
407	2019-04-26	17:34:13	EXFOR-2019-04-26	
408	2019-04-30	10:30:01	trans.1447	
409	2019-04-30	10:45:14	EXFOR-2019-04-30	
410	2019-05-07	16:15:14	trans.b029	
411	2019-05-07	16:29:50	EXFOR-2019-05-07	
412	2019-05-29	08:59:52	trans.f071	
413	2019-05-29	09:28:23	EXFOR-2019-05-29	
414	2019-06-03	15:03:05	trans.l038	
415	2019-06-03	15:19:24	EXFOR-2019-06-03	
416	2019-06-06	11:20:11	trans.c184	
417	2019-06-06	11:35:41	EXFOR-2019-06-06	
418	2019-06-13	16:31:37	trans.l039	
419	2019-06-13	16:31:38	trans.l040	

420	2019-06-13	16:48:15	EXFOR-2019-06-13	
421	2019-06-18	08:55:34	trans.2277	
422	2019-06-18	09:11:14	EXFOR-2019-06-18	
423	2019-06-19	09:44:34	trans.3188	
424	2019-06-19	10:54:59	EXFOR-2019-06-19	
425	2019-06-19	12:30:26	trans.d120	
426	2019-07-03	12:19:12	trans.1448	
427	2019-07-03	12:35:11	EXFOR-2019-07-03	
428	2019-07-15	11:49:30	trans.o067	
429	2019-07-15	11:49:31	trans.o068	
430	2019-07-15	11:49:33	trans.o069	
431	2019-07-15	12:05:58	EXFOR-2019-07-15	
432	2019-07-18	18:35:52	trans.4182	41669
433	2019-07-22	09:27:13	trans.g043	
434	2019-07-22	09:27:13	trans.l041	
435	2019-07-22	11:44:32	trans.e123	
436	2019-07-22	12:02:07	EXFOR-2019-07-22	
437	2019-07-25	11:51:00	trans.m100	
438	2019-07-25	15:14:40	EXFOR-2019-07-25	
439	2019-08-13	13:32:12	trans.1449	
440	2019-08-13	16:45:18	EXFOR-2019-08-13	
441	2019-08-19	11:44:18	trans.1450	
442	2019-08-19	19:53:34	EXFOR-2019-08-19	
443	2019-08-21	19:19:30	trans.m101	
444	2019-08-22	10:45:47	trans.a091	loaded after a089
445	2019-08-22	14:53:38	EXFOR-2019-08-22	
446	2019-08-29	07:08:11	trans.2278	
447	2019-08-29	07:08:14	trans.2279	
448	2019-08-29	10:27:47	EXFOR-2019-08-29	

449	2019-09-16	09:39:58	trans.1451	
450	2019-09-16	09:39:58	trans.2280	23514, 23517, 23520-23521, 23523-23524, 23526-23529
451	2019-09-16	09:54:48	EXFOR-2019-09-16	
452	2019-09-18	16:09:44	trans.1452	
453	2019-09-18	16:25:20	EXFOR-2019-09-18	
454	2019-09-19	13:20:12	trans.l042	
455	2019-09-19	13:37:54	EXFOR-2019-09-19	
456	2019-09-26	17:19:36	trans.c185	
457	2019-09-27	00:04:54	EXFOR-2019-09-26	
458	2019-09-29	18:17:54	trans.1453	
459	2019-10-01	00:23:33	EXFOR-2019-09-29	
460	2019-10-02	17:54:03	trans.2281	
461	2019-10-02	22:36:47	EXFOR-2019-10-02	
462	2019-10-03	16:50:09	trans.1454	
463	2019-10-03	19:01:51	EXFOR-2019-10-03	
464	2019-10-08	00:04:10	trans.a092	
465	2019-10-08	00:04:14	trans.f072	
466	2019-10-08	00:04:17	trans.k019	
467	2019-10-08	01:12:28	EXFOR-2019-10-08	
468	2019-10-10	22:31:01	trans.d121	
469	2019-10-10	22:31:06	trans.d122	
470	2019-10-11	00:12:40	EXFOR-2019-10-11	
471	2019-10-14	10:11:22	trans.o070	
472	2019-10-14	10:09:12	EXFOR-2019-10-14	
473	2019-10-15	15:25:58	trans.4183	
474	2019-10-15	15:40:42	EXFOR-2019-10-15	
475	2019-10-23	15:41:41	trans.1455	

476	2019-10-23	15:41:41	trans.3189	
477	2019-10-23	15:41:42	trans.3190	
478	2019-10-23	13:27:48	EXFOR-2019-10-23	
479	2019-11-20	18:09:58	trans.m102	
480	2019-11-20	13:20:53	EXFOR-2019-11-20	
481	2019-11-22	13:29:29	trans.c186	
482	2019-11-22	14:31:17	EXFOR-2019-11-22	
483	2019-11-25	10:10:32	trans.1456	
484	2019-11-25	11:04:59	EXFOR-2019-11-25	
485	2019-12-11	17:26:00	trans.3191	
486	2019-12-11	18:14:26	EXFOR-2019-12-11	
487	2019-12-16	14:16:16	trans.2282	
488	2019-12-16	14:42:45	trans.s026	
489	2019-12-16	17:03:05	trans.d123	
490	2019-12-16	17:20:01	EXFOR-2019-12-16	
491	2019-12-17	10:05:36	trans.1457	14331
492	2019-12-17	10:05:37	trans.3192	
493	2019-12-17	10:53:30	EXFOR-2019-12-17	
494	2019-12-18	09:51:31	trans.o071	
495	2019-12-18	09:51:39	trans.o072	
496	2019-12-18	10:53:12	EXFOR-2019-12-18	
497	2020-01-08	12:03:10	trans.m103	M0989-M0991
498	2020-01-08	16:26:56	EXFOR-2020-01-08	
499	2020-01-09	17:58:05	trans.f073	
500	2020-01-09	16:00:08	EXFOR-2020-01-09	
501	2020-01-10	10:54:42	trans.1458	
502	2020-01-10	11:44:58	EXFOR-2020-01-10	
503	2020-01-13	10:39:04	trans.1459	
504	2020-01-13	10:39:07	trans.3193	

505	2020-01-13	16:44:31	trans.4184	
506	2020-01-13	17:30:20	EXFOR-2020-01-13	
507	2020-01-20	10:02:34	trans.e124	
508	2020-01-20	10:50:24	EXFOR-2020-01-20	
509	2020-01-21	10:40:52	trans.e125	
510	2020-01-21	10:40:54	trans.k020	
511	2020-01-21	11:10:03	EXFOR-2020-01-21	
512	2020-01-23	12:07:43	trans.d124	
513	2020-01-23	12:59:29	EXFOR-2020-01-23	
514	2020-01-28	10:14:22	trans.2283	
515	2020-01-28	11:00:17	EXFOR-2020-01-28	
516	2020-02-04	10:02:37	trans.r030	
517	2020-02-04	10:39:08	EXFOR-2020-02-04	
518	2020-02-10	13:03:02	trans.1460	
519	2020-02-10	13:03:03	trans.l043	
520	2020-02-10	13:48:27	EXFOR-2020-02-10	
521	2020-02-17	16:51:59	trans.4185	
522	2020-02-17	17:39:44	EXFOR-2020-02-17	
523	2020-02-18	11:51:57	trans.m104	
524	2020-02-18	11:51:59	trans.m105	
525	2020-02-18	12:37:27	EXFOR-2020-02-18	
526	2020-03-02	17:03:30	trans.2284	
527	2020-03-02	17:03:32	trans.3194	
528	2020-03-02	17:03:34	trans.o073	
529	2020-03-02	17:55:04	EXFOR-2020-03-02	
530	2020-03-05	19:39:05	trans.2285	
531	2020-03-05	19:39:08	trans.o074	
532	2020-03-05	20:17:23	EXFOR-2020-03-05	
533	2020-03-09	11:29:15	trans.1461	14555

534	2020-03-09	12:17:24	EXFOR-2020-03-09	
535	2020-03-13	10:22:13	trans.1462	
536	2020-03-13	10:53:42	EXFOR-2020-03-13	
537	2020-03-30	16:19:59	trans.f074	
538	2020-03-30	19:01:52	EXFOR-2020-03-30	
539	2020-04-13	09:57:25	trans.a093	
540	2020-04-13	09:57:28	trans.c187	
541	2020-04-13	19:07:04	EXFOR-2020-04-13	
542	2020-04-15	12:24:17	trans.1463	
543	2020-04-15	12:43:19	EXFOR-2020-04-15	
544	2020-04-16	10:26:42	trans.3195	
545	2020-04-16	10:26:42	trans.d125	D5177, D5178
546	2020-04-16	10:24:09	EXFOR-2020-04-16	
547	2020-04-21	17:41:53	trans.g044	G4074, G4075, G4076
548	2020-04-21	17:41:53	trans.s027	
549	2020-04-21	17:41:53	trans.v037	
550	2020-04-21	17:41:09	EXFOR-2020-04-21	
551	2020-04-23	19:38:06	trans.m106	
552	2020-04-23	19:44:47	EXFOR-2020-04-23	
553	2020-04-30	22:27:34	trans.1464	
554	2020-04-30	22:24:05	EXFOR-2020-04-30	
555	2020-05-15	22:53:24	trans.4186	41683
556	2020-05-15	22:57:36	EXFOR-2020-05-15	
557	2020-05-28	23:30:03	trans.d126	
558	2020-05-28	23:30:03	trans.o075	
559	2020-05-28	23:34:17	EXFOR-2020-05-28	
560	2020-05-31	17:24:09	trans.1465	13093
561	2020-05-31	17:28:21	EXFOR-2020-05-31	
562	2020-06-10	11:02:50	trans.f075	

563	2020-06-10	15:28:04	EXFOR-2020-06-10	
564	2020-06-18	10:57:18	trans.c188	
565	2020-06-18	10:57:18	trans.c189	C2452
566	2020-06-18	11:01:20	EXFOR-2020-06-18	
567	2020-06-22	16:09:27	trans.4187	
568	2020-06-22	16:13:39	EXFOR-2020-06-22	
569	2020-06-23	15:02:10	trans.2286	
570	2020-06-23	15:02:10	trans.a094	A1229.000-001: F039 → A094
571	2020-06-23	16:13:02	trans.o076	
572	2020-06-23	16:17:08	EXFOR-2020-06-23	
573	2020-06-26	14:33:19	trans.f076	
574	2020-06-26	14:37:18	EXFOR-2020-06-26	
575	2020-06-29	10:51:01	trans.f077	
576	2020-06-29	10:55:07	EXFOR-2020-06-29	
577	2020-07-02	17:36:14	trans.e126	
578	2020-07-02	17:40:15	EXFOR-2020-07-02	
579	2020-07-08	20:24:12	trans.1466	
580	2020-07-08	20:28:18	EXFOR-2020-07-08	
581	2020-07-17	10:32:16	trans.a095	
582	2020-07-17	10:32:16	trans.g045	
583	2020-07-17	10:36:22	EXFOR-2020-07-17	
584	2020-07-24	21:06:59	trans.c190	C2469
585	2020-07-24	21:11:01	EXFOR-2020-07-24	
586	2020-07-29	10:45:41	trans.o077	
587	2020-07-29	10:50:25	EXFOR-2020-07-29	
588	2020-08-03	09:45:17	trans.2287	23548
589	2020-08-03	10:00:25	EXFOR-2020-08-03	
590	2020-08-06	09:20:26	trans.3196	
591	2020-08-06	09:20:26	trans.d127	

592	2020-08-06	09:20:26	trans.m107	
593	2020-08-06	09:20:26	trans.s028	
594	2020-08-06	09:24:33	EXFOR-2020-08-06	
595	2020-08-11	12:05:04	trans.e127	
596	2020-08-11	12:09:19	EXFOR-2020-08-11	
597	2020-08-13	19:15:15	trans.1467	14594, 14597, 14609
598	2020-08-13	19:19:20	EXFOR-2020-08-13	
599	2020-08-19	10:33:02	trans.e128	
600	2020-08-19	10:37:07	EXFOR-2020-08-19a	
601	2020-08-19	11:07:28	trans.f078	
602	2020-08-19	11:11:36	EXFOR-2020-08-19b	
603	2020-08-19	11:52:10	trans.f079	
604	2020-08-19	11:56:12	EXFOR-2020-08-19	
605	2020-08-25	08:00:08	trans.c191	
606	2020-08-25	08:05:23	EXFOR-2020-08-25	
607	2020-08-27	15:41:31	trans.4188	
608	2020-08-27	15:45:34	EXFOR-2020-08-27	
609	2020-09-01	17:55:36	trans.1468	
610	2020-09-01	17:59:42	EXFOR-2020-09-01	
611	2020-09-10	10:38:27	trans.f080	
612	2020-09-10	10:42:33	EXFOR-2020-09-10a	
613	2020-09-10	18:04:44	trans.c192	
614	2020-09-10	18:08:50	EXFOR-2020-09-10	
615	2020-09-17	10:34:39	trans.c193	
616	2020-09-17	10:38:47	EXFOR-2020-09-17	
617	2020-09-25	12:44:07	trans.1469	14607, 14617, 14619, 14624
618	2020-09-25	12:48:12	EXFOR-2020-09-25a	
619	2020-09-25	17:22:17	trans.c194	
620	2020-09-25	17:26:18	EXFOR-2020-09-25	

621	2020-10-08	17:05:17	trans.2288	23701-23712
622	2020-10-08	17:05:18	trans.2289	
623	2020-10-08	17:05:18	trans.2290	
624	2020-10-08	17:05:18	trans.o078	
625	2020-10-08	17:09:28	EXFOR-2020-10-08	
626	2020-10-13	22:55:46	trans.f081	
627	2020-10-13	22:59:56	EXFOR-2020-10-13	
628	2020-10-15	10:07:09	trans.e129	
629	2020-10-15	10:11:23	EXFOR-2020-10-15	
630	2020-10-19	10:10:04	trans.1470	
631	2020-10-19	10:14:21	EXFOR-2020-10-19	
632	2020-10-27	10:52:38	trans.e130	
633	2020-10-27	10:56:46	EXFOR-2020-10-27	
634	2020-10-28	12:42:17	trans.c195	
635	2020-10-28	12:46:29	EXFOR-2020-10-28	
636	2020-11-13	12:11:03	trans.4189	
637	2020-11-13	12:15:20	EXFOR-2020-11-13	
638	2020-11-19	21:20:37	trans.d128	
639	2020-11-19	21:24:48	EXFOR-2020-11-19	
640	2020-11-25	10:10:54	trans.1471	
641	2020-11-25	10:15:05	EXFOR-2020-11-25	
642	2020-12-02	09:54:51	trans.4190	
643	2020-12-02	09:59:04	EXFOR-2020-12-02	
644	2020-12-03	16:45:22	trans.3197	
645	2020-12-03	16:49:37	EXFOR-2020-12-03	
646	2020-12-04	11:32:29	trans.m108	
647	2020-12-04	11:36:39	EXFOR-2020-12-04	
648	2020-12-19	10:16:42	trans.m109	
649	2020-12-19	10:21:04	EXFOR-2020-12-19	

650	2021-01-05	11:20:43	trans.2291	
651	2021-01-05	11:20:44	trans.2292	
652	2021-01-05	11:20:44	trans.o079	
653	2021-01-05	11:25:18	EXFOR-2021-01-05	
654	2021-01-06	10:58:44	trans.2293	
655	2021-01-06	10:58:44	trans.2294	
656	2021-01-06	11:03:02	EXFOR-2021-01-06a	
657	2021-01-06	17:53:49	trans.2295	
658	2021-01-06	17:58:07	EXFOR-2021-01-06	
659	2021-01-12	13:48:30	trans.o080	
660	2021-01-12	13:52:42	EXFOR-2021-01-12	
661	2021-01-18	10:32:05	trans.c196	
662	2021-01-18	10:36:16	EXFOR-2021-01-18a	
663	2021-01-18	17:51:13	trans.m110	
664	2021-01-18	17:55:24	EXFOR-2021-01-18	
665	2021-01-20	22:31:36	trans.4191	41711
666	2021-01-20	22:36:39	EXFOR-2021-01-20	
667	2021-01-28	22:15:37	trans.1472	
668	2021-01-28	22:21:08	EXFOR-2021-01-28	
669	2021-01-30	22:06:04	trans.c197	
670	2021-01-30	22:12:46	EXFOR-2021-01-30	
671	2021-02-15	20:55:06	trans.b030	
672	2021-02-15	20:59:27	EXFOR-2021-02-15	
673	2021-02-16	08:21:37	trans.c198	
674	2021-02-16	08:25:57	EXFOR-2021-02-16a	
675	2021-02-16	20:27:06	trans.v038	
676	2021-02-16	20:31:21	EXFOR-2021-02-16	
677	2021-02-17	12:55:43	trans.g046	
678	2021-02-17	12:59:58	EXFOR-2021-02-17	

679	2021-02-19	21:53:34	trans.d129	
680	2021-02-19	21:57:50	EXFOR-2021-02-19	
681	2021-02-20	12:08:00	trans.3198	
682	2021-02-20	12:12:10	EXFOR-2021-02-20	
683	2021-02-24	22:36:58	trans.1473	
684	2021-02-24	22:41:17	EXFOR-2021-02-24	
685	2021-03-03	16:37:04	trans.2296	
686	2021-03-03	16:41:23	EXFOR-2021-03-03	
687	2021-03-05	12:02:15	trans.o081	
688	2021-03-05	12:02:16	trans.s029	
689	2021-03-05	12:06:30	EXFOR-2021-03-05	
690	2021-03-16	10:42:47	trans.4192	41733
691	2021-03-16	10:47:00	EXFOR-2021-03-16	
692	2021-03-20	13:05:42	trans.4193	
693	2021-03-20	13:09:58	EXFOR-2021-03-20	
694	2021-03-22	11:26:04	trans.l044	
695	2021-03-22	11:30:21	EXFOR-2021-03-22	
696	2021-04-06	11:24:22	trans.a096	
697	2021-04-06	11:28:39	EXFOR-2021-04-06	
698	2021-04-15	19:11:22	trans.f082	
699	2021-04-15	19:18:12	EXFOR-2021-04-15	
700	2021-04-21	11:47:29	trans.1474	
701	2021-04-21	11:51:46	EXFOR-2021-04-21	
702	2021-04-22	12:58:17	trans.2297	
703	2021-04-22	13:02:33	EXFOR-2021-04-22	
704	2021-04-23	11:00:48	trans.o082	
705	2021-04-23	11:05:07	EXFOR-2021-04-23	
706	2021-04-27	17:07:54	trans.1475	
707	2021-04-27	17:12:10	EXFOR-2021-04-27	

708	2021-05-18	16:32:59	trans.2298
709	2021-05-18	16:32:59	trans.o083
710	2021-05-18	20:11:35	trans.m111
711	2021-05-18	20:15:59	EXFOR-2021-05-18
712	2021-05-22	12:14:46	trans.3199
713	2021-05-22	12:14:46	trans.v039
714	2021-05-22	12:19:02	EXFOR-2021-05-22
715	2021-05-24	13:09:42	trans.c199
716	2021-05-24	13:13:59	EXFOR-2021-05-24
717	2021-05-25	21:08:28	trans.1476
718	2021-05-25	21:12:45	EXFOR-2021-05-25
719	2021-06-01	10:30:56	trans.a097
720	2021-06-01	10:39:36	EXFOR-2021-06-01
721	2021-06-07	12:43:05	trans.e131
722	2021-06-07	12:47:22	EXFOR-2021-06-07-1
723	2021-06-07	14:12:11	trans.1477
724	2021-06-07	14:16:33	EXFOR-2021-06-07-2
725	2021-06-07	23:32:29	trans.4194
726	2021-06-07	23:36:48	EXFOR-2021-06-07
727	2021-06-15	19:33:14	trans.3200
728	2021-06-15	19:33:14	trans.d130
729	2021-06-15	20:08:51	EXFOR-2021-06-15
730	2021-06-22	11:59:38	trans.e132
731	2021-06-22	12:04:23	EXFOR-2021-06-22
732	2021-06-25	10:38:27	trans.2299
733	2021-06-25	10:42:40	EXFOR-2021-06-25
734	2021-06-28	10:33:21	trans.l045
735	2021-06-28	10:33:21	trans.m112
736	2021-06-28	10:37:38	EXFOR-2021-06-28

737	2021-08-09	12:05:33	trans.1478	
738	2021-08-09	12:09:46	EXFOR-2021-08-09	
739	2021-08-10	10:13:06	trans.m113	
740	2021-08-10	10:17:41	EXFOR-2021-08-10a	
741	2021-08-10	14:09:14	trans.4195	
742	2021-08-10	14:09:14	trans.4196	
743	2021-08-10	14:16:25	EXFOR-2021-08-10	
744	2021-08-13	08:02:11	trans.f083	
745	2021-08-13	08:06:41	EXFOR-2021-08-13	
746	2021-08-17	10:28:13	trans.f084	
747	2021-08-17	10:32:25	EXFOR-2021-08-17	
748	2021-08-19	17:04:00	trans.f085	
749	2021-08-19	17:08:17	EXFOR-2021-08-19	
750	2021-08-20	16:38:30	trans.1479	
751	2021-08-20	16:38:30	trans.c200	
752	2021-08-20	16:42:42	EXFOR-2021-08-20	
753	2021-08-23	19:56:18	trans.1480	
754	2021-08-23	20:00:35	EXFOR-2021-08-23	
755	2021-08-24	22:28:05	trans.2300	
756	2021-08-24	22:32:23	EXFOR-2021-08-24	
757	2021-09-07	20:20:29	trans.c201	
758	2021-09-07	20:24:50	EXFOR-2021-09-07	
759	2021-09-14	10:04:05	trans.1481	14658
760	2021-09-14	10:04:05	trans.4197	
761	2021-09-14	10:08:23	EXFOR-2021-09-14	
762	2021-09-15	20:29:38	trans.4198	
763	2021-09-15	20:33:54	EXFOR-2021-09-15	
764	2021-09-21	13:09:10	trans.a098	
765	2021-09-21	13:13:27	EXFOR-2021-09-21	

766	2021-09-29	20:07:54	trans.3201	
767	2021-09-29	20:07:54	trans.d131	
768	2021-09-29	20:07:54	trans.g047	
769	2021-09-29	20:12:17	EXFOR-2021-09-29	
770	2021-10-01	16:50:43	trans.4199	
771	2021-10-01	16:50:43	trans.m114	
772	2021-10-01	16:55:01	EXFOR-2021-10-01	
773	2021-10-05	16:09:27	trans.f086	
774	2021-10-05	16:13:44	EXFOR-2021-10-05	
775	2021-10-22	17:15:56	trans.c202	
776	2021-10-22	17:20:11	EXFOR-2021-10-22	
777	2021-11-08	17:13:27	trans.1482	
778	2021-11-08	17:13:27	trans.1483	
779	2021-11-08	17:17:40	EXFOR-2021-11-08	
780	2021-11-12	14:48:43	trans.4200	
781	2021-11-12	14:52:58	EXFOR-2021-11-12	
782	2021-11-17	14:45:43	trans.3202	
783	2021-11-17	17:21:25	trans.d132	
784	2021-11-17	17:25:39	EXFOR-2021-11-17	
785	2021-11-22	12:30:07	trans.m115	
786	2021-11-22	12:34:23	EXFOR-2021-11-22	
787	2021-11-23	10:32:33	trans.c203	T0200.000-001: T022 → C203; T0200.002-003: T020 → C203; T0201.000-004: T020 → C203
788	2021-11-23	10:32:33	trans.l046	
789	2021-11-23	10:36:52	EXFOR-2021-11-23	
790	2021-12-01	16:15:00	trans.2301	
791	2021-12-01	16:19:15	EXFOR-2021-12-01	
792	2021-12-02	12:08:01	trans.2302	
793	2021-12-02	12:08:01	trans.l047	L0269

794	2021-12-02	12:12:16	EXFOR-2021-12-02
795	2021-12-07	11:01:40	trans.1484
796	2021-12-07	11:05:57	EXFOR-2021-12-07
797	2021-12-08	23:55:58	trans.1485
798	2021-12-09	00:00:39	EXFOR-2021-12-08
799	2021-12-15	10:37:23	trans.f087
800	2021-12-15	10:42:13	EXFOR-2021-12-15a
801	2021-12-15	13:27:19	trans.c204
802	2021-12-15	13:31:32	EXFOR-2021-12-15
803	2021-12-21	10:20:43	trans.3203
804	2021-12-21	10:24:50	EXFOR-2021-12-21
805	2022-01-04	12:02:47	trans.o084
806	2022-01-04	12:07:02	EXFOR-2022-01-04
807	2022-01-12	10:39:08	trans.o085
808	2022-01-12	10:43:33	EXFOR-2022-01-12a
809	2022-01-12	19:17:08	trans.3204
810	2022-01-12	19:17:08	trans.d133
811	2022-01-12	19:22:08	EXFOR-2022-01-12
812	2022-01-13	15:40:00	trans.m116
813	2022-01-13	15:40:00	trans.4201
814	2022-01-13	15:44:31	EXFOR-2022-01-13
815	2022-01-17	17:28:36	trans.2303
816	2022-01-17	17:32:56	EXFOR-2022-01-17
817	2022-01-19	22:39:40	trans.c205
818	2022-01-19	22:44:01	EXFOR-2022-01-19
819	2022-01-24	16:02:11	trans.3205
820	2022-01-24	16:02:11	trans.b031
821	2022-01-24	16:02:11	trans.d134
822	2022-01-24	16:06:52	EXFOR-2022-01-24

823	2022-01-26	11:26:56	trans.1486	
824	2022-01-26	11:32:11	EXFOR-2022-01-26	
825	2022-01-28	11:29:09	trans.c206	
826	2022-01-28	11:33:59	EXFOR-2022-01-28	
827	2022-01-31	14:44:26	trans.4202	
828	2022-01-31	14:44:26	trans.b032	
829	2022-01-31	14:49:14	EXFOR-2022-01-31	
830	2022-02-15	10:26:44	trans.1487	
831	2022-02-15	10:26:45	trans.c207	
832	2022-02-15	10:31:34	EXFOR-2022-02-15	
833	2022-02-17	17:56:29	trans.c208	C2614, C2615
834	2022-02-17	18:01:23	EXFOR-2022-02-17	
835	2022-03-01	11:25:47	trans.1488	
836	2022-03-01	11:30:39	EXFOR-2022-03-01	
837	2022-03-03	10:27:00	trans.3206	
838	2022-03-03	10:31:51	EXFOR-2022-03-03	
839	2022-03-06	13:48:23	trans.4203	
840	2022-03-06	13:53:21	EXFOR-2022-03-06	
841	2022-03-07	14:20:05	trans.1489	14544
842	2022-03-07	14:24:56	EXFOR-2022-03-07	
843	2022-03-19	13:37:18	trans.2304	
844	2022-03-19	13:37:18	trans.2305	
845	2022-03-19	13:37:18	trans.2306	
846	2022-03-19	13:37:18	trans.2307	
847	2022-03-19	13:42:16	EXFOR-2022-03-19	
848	2022-03-21	17:21:39	trans.d135	
849	2022-03-21	17:21:39	trans.g048	
850	2022-03-21	17:26:30	EXFOR-2022-03-21	
851	2022-03-23	12:47:42	trans.s030	

852	2022-03-23	12:52:31	EXFOR-2022-03-23
853	2022-03-28	14:33:05	trans.1490
854	2022-03-28	14:33:05	trans.c209
855	2022-03-28	14:37:56	EXFOR-2022-03-28
856	2022-04-01	12:53:21	trans.m117
857	2022-04-01	12:58:14	EXFOR-2022-04-01
858	2022-04-19	18:50:39	trans.1491
859	2022-04-19	18:55:35	EXFOR-2022-04-19
860	2022-05-04	14:07:14	trans.1492
861	2022-05-04	14:12:12	EXFOR-2022-05-04
862	2022-05-24	10:11:14	trans.c210
863	2022-05-24	10:16:17	EXFOR-2022-05-24
864	2022-05-30	14:46:40	trans.3207
865	2022-05-30	14:46:40	trans.b033
866	2022-05-30	14:46:40	trans.d136
867	2022-05-30	14:51:39	EXFOR-2022-05-30
868	2022-05-31	14:19:40	trans.l048
869	2022-05-31	14:24:47	EXFOR-2022-05-31
870	2022-06-07	13:43:27	trans.o086
871	2022-06-07	13:43:27	trans.o087
872	2022-06-07	13:48:35	EXFOR-2022-06-07
873	2022-06-09	15:31:00	trans.1493
874	2022-06-09	15:35:59	EXFOR-2022-06-09
875	2022-06-10	12:45:30	trans.4204
876	2022-06-10	12:45:30	trans.4205
877	2022-06-10	12:50:26	EXFOR-2022-06-10
878	2022-06-13	17:42:58	trans.e133
879	2022-06-13	17:42:58	trans.e134
880	2022-06-13	17:48:01	EXFOR-2022-06-13

881	2022-06-28	12:30:27	trans.4206	
882	2022-06-28	12:30:27	trans.m118	
883	2022-06-28	12:30:27	trans.v040	
884	2022-06-28	12:35:24	EXFOR-2022-06-28	
885	2022-07-05	13:16:39	trans.a099	
886	2022-07-05	13:16:39	trans.f088	
887	2022-07-05	13:21:36	EXFOR-2022-07-05	
888	2022-07-21	11:32:42	trans.1494	
889	2022-07-21	11:32:43	trans.2308	
890	2022-07-21	11:32:43	trans.c211	
891	2022-07-21	11:32:43	trans.o088	
892	2022-07-21	11:37:37	EXFOR-2022-07-21	
893	2022-08-03	09:39:30	trans.c212	C2707
894	2022-08-03	09:45:04	EXFOR-2022-08-03a	
895	2022-08-03	10:04:16	trans.1495	Alteration flag C missing in 13969.000-001
896	2022-08-03	10:12:09	EXFOR-2022-08-03	
897	2022-08-13	23:35:48	trans.s031	
898	2022-08-13	23:41:14	EXFOR-2022-08-13	
899	2022-08-17	10:15:09	trans.m119	
900	2022-08-17	10:20:33	EXFOR-2022-08-17	
901	2022-08-18	11:15:56	trans.j011	
902	2022-08-18	11:15:56	trans.k021	
903	2022-08-18	11:21:25	EXFOR-2022-08-18	
904	2022-08-19	10:17:15	trans.e135	
905	2022-08-19	10:22:36	EXFOR-2022-08-19	
906	2022-08-22	22:41:43	trans.2309	
907	2022-08-22	22:41:43	trans.2310	
908	2022-08-22	22:41:44	trans.2311	
909	2022-08-22	22:47:12	EXFOR-2022-08-22	

910	2022-08-23	16:25:33	trans.c213
911	2022-08-23	16:25:33	trans.l049
912	2022-08-23	16:25:33	trans.o089
913	2022-08-23	16:31:09	EXFOR-2022-08-23
914	2022-08-29	16:56:41	trans.c214
915	2022-08-29	17:02:09	EXFOR-2022-08-29
916	2022-09-16	10:10:33	trans.f089
917	2022-09-16	10:29:16	EXFOR-2022-09-16a
918	2022-09-16	18:52:50	trans.a100
919	2022-09-16	19:13:55	EXFOR-2022-09-16
920	2022-09-27	09:36:01	trans.1496
921	2022-09-27	09:36:01	trans.1497
922	2022-09-27	09:54:07	EXFOR-2022-09-27
923	2022-09-28	10:03:49	trans.1498
924	2022-09-28	10:21:13	EXFOR-2022-09-28
925	2022-10-05	13:38:04	trans.o090
926	2022-10-05	13:57:10	EXFOR-2022-10-05
927	2022-10-12	10:45:16	trans.l050
928	2022-10-12	11:03:45	EXFOR-2022-10-12
929	2022-10-13	22:19:21	trans.4207
930	2022-10-13	22:39:28	EXFOR-2022-10-13
931	2022-10-17	15:06:07	trans.f090
932	2022-10-17	15:06:08	trans.f091
933	2022-10-17	15:24:57	EXFOR-2022-10-17
934	2022-10-19	11:40:26	trans.1499
935	2022-10-19	11:46:14	EXFOR-2022-10-19
936	2022-10-21	13:22:01	trans.f092
937	2022-10-21	13:27:09	EXFOR-2022-10-21
938	2022-11-08	18:40:21	trans.m120

939	2022-11-08	18:44:58	EXFOR-2022-11-08	
940	2022-11-28	17:27:23	trans.c215	
941	2022-11-28	17:32:24	EXFOR-2022-11-28	
942	2022-12-23	17:39:02	trans.a101	
943	2022-12-23	17:39:02	trans.a102	
944	2022-12-23	17:39:02	trans.f093	
945	2022-12-23	17:44:16	EXFOR-2022-12-23	
946	2022-12-26	19:00:16	trans.a103	
947	2022-12-26	19:05:44	EXFOR-2022-12-26	
948	2023-01-04	13:54:25	trans.c216	T0230.002,007: T018 → C216
949	2023-01-04	13:59:30	EXFOR-2023-01-04	
950	2023-01-13	11:35:17	trans.1500	
951	2023-01-13	11:35:17	trans.c217	T0086.000-001: T022 → C217
952	2023-01-13	11:40:22	EXFOR-2023-01-13	
953	2023-01-16	18:04:14	trans.d137	
954	2023-01-16	18:10:07	EXFOR-2023-01-16	
955	2023-01-17	11:24:56	trans.b034	
956	2023-01-17	11:24:56	trans.g049	G4017.002-003: D063 → G049
957	2023-01-17	11:30:26	EXFOR-2023-01-17	
958	2023-01-18	10:10:01	trans.s032	
959	2023-01-18	10:15:21	EXFOR-2023-01-18a	
960	2023-01-18	13:13:16	trans.4208	
961	2023-01-18	13:13:16	trans.v041	
962	2023-01-18	13:18:22	EXFOR-2023-01-18b	
963	2023-01-18	17:17:10	trans.m121	
964	2023-01-18	17:22:25	EXFOR-2023-01-18	
965	2023-01-20	09:59:08	trans.3208	
966	2023-01-20	10:04:29	EXFOR-2023-01-20	
967	2023-02-13	21:27:58	trans.c218	

968	2023-02-13	21:32:54	EXFOR-2023-02-13
969	2023-02-27	17:49:55	trans.4209
970	2023-02-27	17:49:55	trans.4210
971	2023-02-27	17:54:44	EXFOR-2023-02-27
972	2023-03-02	18:56:48	trans.1501
973	2023-03-02	19:02:06	EXFOR-2023-03-02
974	2023-03-06	10:08:11	trans.1502
975	2023-03-06	10:13:17	EXFOR-2023-03-06a
976	2023-03-06	11:28:37	trans.c219
977	2023-03-06	11:33:34	EXFOR-2023-03-06
978	2023-03-07	10:12:51	trans.e136
979	2023-03-07	10:12:51	trans.m122
980	2023-03-07	10:17:57	EXFOR-2023-03-07
981	2023-03-14	15:27:08	trans.f094
982	2023-03-14	15:32:06	EXFOR-2023-03-14
983	2023-03-15	12:05:14	trans.c220
984	2023-03-15	12:10:54	EXFOR-2023-03-15
985	2023-03-31	16:34:18	trans.2312
986	2023-03-31	16:39:20	EXFOR-2023-03-31a
987	2023-03-31	17:33:10	trans.o091
988	2023-03-31	17:38:11	EXFOR-2023-03-31
989	2023-04-04	12:28:50	trans.o092
990	2023-04-04	12:33:57	EXFOR-2023-04-04
991	2023-04-11	18:54:49	trans.1503
992	2023-04-11	18:59:49	EXFOR-2023-04-11
993	2023-04-19	10:45:50	trans.4211
994	2023-04-19	10:50:45	EXFOR-2023-04-19
995	2023-04-29	18:29:44	trans.c221
996	2023-04-29	18:35:09	EXFOR-2023-04-29

997	2023-05-15	17:28:26	trans.c222	
998	2023-05-15	17:33:23	EXFOR-2023-05-15	
999	2023-05-23	14:21:43	trans.2313	
1000	2023-05-23	14:21:43	trans.2314	
1001	2023-05-23	14:21:43	trans.o093	
1002	2023-05-23	14:21:43	trans.o094	
1003	2023-05-23	14:33:33	EXFOR-2023-05-23	Automatic addition of "19" in N2 of this backup and later ones
1004	2023-05-29	17:48:14	trans.3209	
1005	2023-05-29	17:48:14	trans.b035	
1006	2023-05-29	17:48:14	trans.d138	
1007	2023-05-29	17:48:14	trans.g050	
1008	2023-05-29	17:56:53	EXFOR-2023-05-29	
1009	2023-05-31	17:33:42	trans.1504	
1010	2023-05-31	17:43:04	EXFOR-2023-05-31	
1011	2023-06-12	18:40:29	trans.m123	
1012	2023-06-12	18:40:29	trans.m124	
1013	2023-06-12	18:49:06	EXFOR-2023-06-12	
1014	2023-06-16	11:47:47	trans.4212	
1015	2023-06-16	11:56:14	EXFOR-2023-06-16	
1016	2023-06-23	15:46:40	trans.c223	
1017	2023-06-23	15:55:08	EXFOR-2023-06-23	
1018	2023-06-26	17:43:23	trans.c224	
1019	2023-06-26	17:53:24	EXFOR-2023-06-26	
1020	2023-06-29	13:02:40	trans.e137	
1021	2023-06-29	13:14:48	EXFOR-2023-06-29	
1022	2023-07-14	10:38:52	trans.c225	
1023	2023-07-14	10:48:53	EXFOR-2023-07-14	
1024	2023-07-18	10:37:02	trans.o095	

1025	2023-07-18	10:47:13	EXFOR-2023-07-18
1026	2023-08-16	12:25:44	trans.c226
1027	2023-08-16	12:35:50	EXFOR-2023-08-16
1028	2023-09-07	17:21:48	trans.2315
1029	2023-09-07	17:31:08	EXFOR-2023-09-07
1030	2023-09-08	16:46:16	trans.4213
1031	2023-09-08	16:54:57	EXFOR-2023-09-08
1032	2023-09-12	16:42:39	trans.m125
1033	2023-09-12	16:51:07	EXFOR-2023-09-12
1034	2023-09-13	11:28:49	trans.1505
1035	2023-09-13	11:37:35	EXFOR-2023-09-13
1036	2023-09-25	16:58:59	trans.1506
1037	2023-09-25	17:08:35	EXFOR-2023-09-25
1038	2023-09-28	08:54:20	trans.2316
1039	2023-09-28	08:54:20	trans.2317
1040	2023-09-28	08:59:08	EXFOR-2023-09-28
1041	2023-10-03	14:50:41	trans.e138
1042	2023-10-03	14:55:41	EXFOR-2023-10-03
1043	2023-10-25	13:50:05	trans.o096
1044	2023-10-25	13:55:07	EXFOR-2023-10-25
1045	2023-10-27	10:41:26	trans.o097
1046	2023-10-27	10:46:31	EXFOR-2023-10-27